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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,995	03/15/2006	Johannes Antonius Craamer	07054.0006.PCUS00	5581
32894 HOWREY LLI	7590 01/18/2008	EXAMINER		
C/O IP DOCKETING DEPARTMENT			NGUYEN, KHANH TUAN	
FALLS CHUR	.W PARK DR., SUITE 2 CH, VA 22042	.00	ART UNIT	PAPER NUMBER
	ŕ		1796	
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			01/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/571,995	CRAAMER, JOHANNES ANTONIUS			
		Examiner	Art Unit			
		Khanh T. Nguyen	1796			
- Period fo	- The MAILING DATE of this communication app r Reply	ears on the cover sheet with	h the correspondence address			
WHIC - Exten after S - If NO - Failure Any re	PRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 (SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period versely within the set or extended period for reply will, by statute, exply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a repail apply and will expire SIX (6) MONT cause the application to become ABA	ATION. ply be timely filed  HS from the mailing date of this communication. INDONED (35 U.S.C. § 133).			
Status						
1)🛛	Responsive to communication(s) filed on <u>30 N</u>	ovember 2007.				
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition	on of Claims					
4)⊠ Claim(s) <u>1-3,5-15,18-23,25 and 26</u> is/are pending in the application.						
4	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
•	Claim(s) <u>1-3,5-15,18-23,25 and 26</u> is/are rejec	ted.				
•	Claim(s) is/are objected to.					
. 8)∐	Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers						
9) 🔲 🗆	The specification is objected to by the Examine	r.				
•	Γhe drawing(s) filed on is/are: a) ☐ acc					
	Applicant may not request that any objection to the					
	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex					
Priority u	nder 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
" 5	ee the attached detailed Office action for a list	or the certified copies not r	eceiveu.			
Attachment		_				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:						

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### **DETAILED ACTION**

#### Final

# Response to Amendment

- 1. The amendment filed on 11/23/2007 is entered and acknowledged by the Examiner. Claims 1-3, 5-15, 18-23, and 25-26 are currently pending in the instant application. Claims 4, 16, 17, and 24 have been canceled.
- 2. The objected to the specification due to minor informality is withdrawn light of Applicant's amendment. The objection of claims 1 and 23 due to minor informality is withdrawn light of Applicant's amendment. The rejection of claims 1 and 23 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in light of applicant's amendment and remarks. The rejection of claims 1-3, 5-15, 18-23, and 25-26 under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S. Pat. 6,120,560) or Dawson et al. (G.B Pat. 2,187,419) in view of Teumer (U.S Pat. 4,347,521) is withdrawn in light of Applicant's amendments and remarks.

#### Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 11/30/2007 has been initialed by the Examiner.

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# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-3, 5, 7-15, 18-23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S Pat. 6,120,560) or Dawson et al. (G.B Pat. 2,187,419) either in view of English Translated of Ishihara et al. (JP Pub. 06-220781) or in view of English Translation of Masuda et al. (JP Pub. 60-157867).

With respect to instant claims 1-3, 5, 7-15, 18-23, and 25-26, Miller discloses (please refer to fig. 1, fig. 2 and fig. 3) a method for upgrading a textile article (5) such as clothing, using an upgrading device such as a solid shade dyer (12) and a dyeing jet patterning device (20) to apply droplets of dye to the clothing article. The said patterning device comprising a series of nozzles or applicator arrays (54) that can be actuated by computer (digitally controlled). A conveyor or roller (34, 38, 52) transport the textile articles to the array of nozzles (54), wherein the first nozzles (not label) coat the textile article with a dyeing ink and subsequently guild the said article to the second nozzle (not label) to be coated with a second dye color or pattern. The method comprising the steps of a) affixing a first textile article (5) to the conveyor (34, 38, 52) to

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substantially prevent relative movement there between; b) guiding the first textile article past a first row (12) of nozzles; c) performing with the first row (12) of nozzles one of the operations of painting, coating or finishing of the textile article carried there past; d) subsequently guiding the first textile past a second row (54) of nozzles; e) performing with the second row (54) of nozzles another of the operations of painting, coating or finishing of the textile article carried there past (Col. 3, lines 30-65 and Col. 4, lines 5-50).

Similarly, Dawson discloses (please refer to fig. 1 to fig. 4) a method for upgrading a textile article (14) such as clothing, using an upgrading device such as a patterning device (B, C, D), a setting station (F) and a computer 30 to digitally control the pattern or design. The said patterning device comprises of plurality of nozzles or capillary jets (17) for applying one or more substances to the textile articles (14), in addition to a conveyor belt (12) for transporting the textile articles past the nozzles (17), wherein the nozzles (17) are ordered in a number of successively placed rows extending transversely of the transporting direction of the textile article, the method comprising the steps of a) affixing a first textile article (14) to the conveyor (12) onto a feed station (A) to substantially prevent relative movement there between; b) guiding the first textile article past a first row (15 B) of nozzles; c) performing with the first row (15 B) of nozzles one of the operations of painting, coating or finishing of the textile article carried there past; d) subsequently guiding the first textile past a second row (15 C) of nozzles; e) performing with the second row (15 C) of nozzles another of the operations of painting, coating or finishing of the textile article carried there past. After coated with

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a plurality of design or pattern, the substrate is take-off at station E (Col. 2, lines 75-120). Dawson further discloses the printing line comprising a computer (30) for controlling the pattern devices (B, C, D) for printing or coating a pre-programmable pattern or design (Col. 3, lines 95-108) onto a substrate.

The difference between Miller and Dawson references and the instant application is that both Miller and Dawson failed to suggest a step of affixing the textile article to the conveyor.

In an analogous art, Ishihara teaches affixing fabric 1 (textile article) to a conveyor belt 3 using a double-sided adhesive sheet 4 to easily obtain a high-quality printed product during the circulatory movement of the endless conveyor belt at high operating efficiency (Abstract).

Masuda teaches a method of affixing the cloth 2 to the conveyor belt 3 using a cloth-suction housing 4 wherein the cloth is affix on the conveyor by suction and move along to the array of nozzles 1 to be coated by ink jet system without causing staggering or distortion even when the cloth is flexible and with little blurring of droplets and large penetration depth (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and apparatus for upgrading textile as taught by Miller or Dawson by affixing the textile article (i.e. fabric and cloth) to the conveyor by double-sided adhesive sheet as suggested by Ishihara or applying suction to affix the cloth to the conveyor as suggested by Masuda in order to provide high-

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quality printed product at high operating efficiency and/or prevent staggering or distortion to the cloth during coating process.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S Pat. 6,120,560) or Dawson et al. (G.B Pat. 2,187,419) either in view of English Translated of Ishihara et al. (JP Pub. 06-220781) or in view of English Translation of Masuda et al. (JP Pub. 60-157867) as applied to the above claims, and further in view of Teumer (U.S Pat. 4,347,521).

Miller, Dawson, Ishihara, and Masuda are relied set forth above. Miller, Dawson, Ishihara, and Masuda failed to suggest a method that generates at least 100,000 droplets per second.

In the same field of endeavor, Teumer discloses a coating method by drop printing system that contains an array of nozzles 18 capable of generating at least from about 100,000 drops per second (dps) to over 200,000 dps (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method and apparatus for upgrading textile articles, as taught by Miller or Dawson in view of either Ishihara or Masuda, by incorporating an array of nozzles capable of producing at least 100,000 dps, as taught by Teumer, in order to improve the method and apparatus for compensating for distortion in a scan or print line of drops due relative motion of the drop generator and target in a printing system having multiple nozzles (Col. 1, lines 53-58).

## Response to Arguments

7. Applicant's arguments with respect to claims 1-3, 5-15, 18-23, and 25-26 have been considered but are moot in view of the new ground(s) of rejection set forth above.

### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571)

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272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST

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PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**///** KTN

01/14/2008

Mark Kopec

Primary Examiner